

REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks. The Specification and claims 1, 5, 6, 15, and 17 are hereby amended. Claims 18-34 are new.

Amendments of the Specification are made to correct typographic errors and are supported by Figure 8. The amendment of claims 1 and 6, reciting "wherein the calculating unit includes at least a unit that multiplies the detected temperature obtained by the temperature detecting unit by a coefficient that changes in relation to said temperature for correction", is supported by subject matter of claim 15. The amendment of claim 5, reciting "wherein the fourth step includes at least a step of multiplying the detected temperature by a coefficient that changes in relation to the temperature for correction, wherein the temperature for correction is obtained in the second step", is supported by subject matter of claim 17. The amendment of claims 15 and 17, reciting adding to the detected temperature a temperature obtained by multiplying the detected temperature by a coefficient that is not negative", is supported by Figures 8 and 10 which disclose:

$$T_{tc}/T_{tp} = 1 + \alpha (T_{gd} \text{ or } T_{tm}) \geq 1$$

Therefore,

$$T_{tc} = T_{tp} + T_{tp} \times \alpha (T_{gd} \text{ or } T_{tm}) \geq T_{tp}$$

and

$$\alpha (T_{gd} \text{ or } T_{tm}) \geq 0$$

New claims 18 and 19, reciting that the correction coefficient (T_{tc}/T_{tp}) decreases as the temperature for correction increases, is supported by Figures 8 and 10. New claim 20 is supported by subject matter of claim 1. The limitation of new claims 20, 24, and 25, reciting adding to the detected temperature a correction amount that decreases as the temperature for correction increases, is supported by Figures 8 and 10, where it shows that the calculating unit performs $T_{tc} = T_{tp} + T_{tp} \times \alpha (T_{gd} \text{ or } T_{tm})$. Thus the correction

amount α (Tgd or Ttm) decreases as the temperature for correction increases. New claims 21-33 is supported by subject matter of claims 2-14, respectively. New claim 34 is supported by subject matter of claim 16.

Claims 1-5 and 16 were rejected as being unpatentable over Machler (US 2,837,917 A) in view of Junkert (US 4,722,612 A). Applicants traverse this rejection. Claims 1 and 5 include allowable subject matter of claims 15 and 17, thereby rendering the rejection moot. Applicants are not conceding the correctness of the rejection as applied to the rejected claims. Favorable reconsideration of claims 1-5 and 16 is requested.

Claims 6-7, 9, and 11-14 were rejected for being unpatentable over Gillen (US 5,999,768 A) in view of Junkert. Applicants traverse this rejection. Claim 6 includes allowable subject matter of claim 15, thereby rendering the rejection moot. Applicants are not conceding the correctness of the rejection as applied to the rejected claims. Favorable reconsideration of claims 6-7, 9, and 11-14 is requested.

Claim 8 was rejected for being unpatentable over Gillen, in view of Junkert, and further in view of Omata (US 2002/0044801 A1). Applicants traverse this rejection. Claim 8 should be allowable for at least the same reasons as claim 6, from which it depends. Applicants are not conceding the correctness of the rejection as applied to the rejected claim. Omata does not remedy the deficiencies of Gillen and Junkert, as previously noted. Favorable reconsideration of claim 8 is requested.


Claim 10 was rejected for being unpatentable over Gillen, in view of Junkert, and further in view of Tomita (US 2001/0051057 A1). Applicants traverse this rejection. Claim 10 should be allowable for at least the same reasons as claim 6, from which it depends. Applicants are not conceding the correctness of the rejection as applied to the rejected claim. Tomita does not remedy the deficiencies of Gillen and Junkert, as previously noted. Favorable reconsideration of claim 10 is requested.

Further, none of the cited prior art references suggest a calculating unit which adds to the detected temperature a correction amount that decreases as the temperature

for correction increases, after said detected temperature has been corrected based on a function of the environmental temperature, as required by new claims 20, 24, and 25.

In view of the above, favorable reconsideration in the form of a notice of allowance is requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612)455-3804.

Respectfully Submitted,



Douglas P. Mueller

Reg. No.: 30,300

Hamre, Schumann, Mueller & Larson, P.C.

225 South Sixth Street

Suite 2650

Minneapolis, MN 55402

612.455.3800

Dated: May 16, 2005



DPM:mfe